

U.S.S.N. 10/623,398

Filed: July 18, 2003

AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT

Amendment

In the Claims

Please amend the claims as follows.

1. (previously presented) A method of using a glycosaminoglycan-degrading enzyme to reduce a cell proliferative response comprising
administering an effective amount of the enzyme to an individual in need thereof,
wherein the enzyme removes dermatan sulfate or chondroitin sulfate from cell surfaces thereby
effectively decreasing growth factor receptors on the cell surfaces, and
wherein decreasing the growth factor receptors thereby decreases the cell proliferative
response to such growth factors.
2. (Original) The method of claim 1 wherein the enzyme is selected from the group
consisting of bacterial dermatan or chondroitin sulfate degrading enzyme and is selected from
the group consisting of chondroitinase AC from *Flavobacterium heparinum*, chondroitinase B
from *Flavobacterium heparinum*, chondroitin sulfate degrading enzymes from *Bacteroides*
species, chondroitin sulfate degrading enzymes from *Proteus vulgaris*, chondroitin sulfate
degrading enzymes from *Micrococcus*, chondroitin sulfate degrading enzymes from *Vibrio*
species, chondroitin sulfate degrading enzymes from *Arthrobacter aurescens*, arylsulfatase B,
N-acetylgalactosamine-6-sulfatase and iduronate sulfatase from mammalian cells, these enzymes
expressed from recombinant nucleotide sequences in bacteria and combinations thereof.

3. (cancelled)

4. (Original) The method of claim 1 wherein the enzyme is a bacterial enzyme.

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5. (previously presented) The method of claim 4 wherein the enzyme is chondroitinase B.
6. (previously presented) The method of claim 1 wherein the enzyme is administered to decrease fibroblast proliferation.
7. (previously presented) The method of claim 1 wherein the chondroitin sulfate is selected from the group consisting of chondroitin sulfate B, chondroitin sulfate A and chondroitin sulfate C.
8. (previously presented) The method of claim 1 wherein the individual has scarring or is at risk of scarring.
9. (Original) The method of claim 1 wherein the enzyme is administered systemically.
10. (Original) The method of claim 1 wherein the enzyme is administered topically or locally at or adjacent to a site in need of treatment.
11. (Original) The method of claim 1 wherein the enzyme is administered in a controlled and/or sustained release formulation.
- 12-19. (cancelled)